U.S. cow-calf producer interest in and access to technology for cattle health and production record-keeping purposes

W. Jumper1, DVM; C. Huston1, DVM, PhD, DACVPM; R. Wills2, DVM, PhD, DACVM, Dipl. Epidemiology; D. Smith1, DVM, PhD, DACVPM, Dipl. Epidemiology

1Department of Pathobiology and Population Medicine, College of Veterinary Medicine, Mississippi State University, Mississippi State, MS 39762; 2Department of Comparative Biomedical Sciences, College of Veterinary Medicine, Mississippi State University, Mississippi State, MS 39762

Introduction
The objective of this study was to describe U.S. cow-calf producer interest in and access to technology for collection and utilization of cattle health and production records (CHPR).

Materials and methods
We anonymously surveyed 14,294 cow-calf producers across the U.S. Multivariable logistic regression by manual forward selection was used to test demographic factors for association with producer opinions toward using technology to keep CHPR.

Results
The survey response rate was 26%, with 97% of respondents actively involved in cow-calf production. Of these, 92% had access to a computer for record-keeping purposes, 88% said internet access was available at their operation’s headquarters, and 85% said they had a smartphone. A cellphone-signal was available where cattle are worked for 67% of respondents, and 55% were interested in using a smartphone to record CHPR. Factors associated with interest in using a smartphone to record CHPR were age ≤ 64 years (OR = 3.4, 95% C.I. = 2.9, 3.9; compared to ≥ 65 years), currently using any type of CHPR (OR = 2.1, 95% C.I. = 1.7, 2.6; compared to not currently keeping any type of CHPR), level of education (Bachelor’s degree or less: OR = 1.8, 95% C.I. = 1.4, 2.2; professional/post-graduate degree: OR = 2.0, 95% C.I. = 1.6, 2.5; compared to High-school diploma or less), cow-calf operation as primary income source (OR = 1.5, 95% C.I. = 1.3, 1.8; compared to not being primary income source), and herd size (50-99 head: OR = 1.1, 95% C.I. = 0.9, 1.3; 100-199 head: OR = 1.3, 95% C.I. = 1.0, 1.6; 200 head or greater: OR = 1.5, 95% C.I. = 1.2, 1.9; compared to < 50 head).

Significance
Cow-calf producers in the U.S. commonly have access to technology needed to maintain electronic CHPR.